

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference NIS-1088-PCT	FOR FURTHER ACTION		see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/JP2004/007865	International filing date (day/month/year) 31/05/2004	(Earliest) Priority Date (day/month/year) 18/06/2003	
Applicant NISSAN MOTOR CO., LTD.			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2004/007865

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M4/04 H01M4/02 H01M8/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 02, 30 January 1998 (1998-01-30) -& JP 09 274909 A (DAINIPPON PRINTING CO LTD), 21 October 1997 (1997-10-21)	7-13
Y	abstract	1-6
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 08, 30 June 1998 (1998-06-30) -& JP 10 064514 A (YUASA CORP), 6 March 1998 (1998-03-06)	14-20
Y	abstract	1-6
	----- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the International search

16 August 2005

Date of mailing of the International search report

24/08/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Kuhn, T

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/007865

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 00/10736 A (SRI INTERNATIONAL; NARANG, SUBHASH; SHARMA, SUNITY; COX, PHILIP; VENTU) 2 March 2000 (2000-03-02)	1-6
A	page 2, paragraph 2 page 6, line 12 - line 29 page 8, line 14 - line 17 page 9, line 5 - line 11 page 9, line 23 - line 26 page 10, line 1 - line 8 page 15, line 23 - page 18, line 10 page 24, line 4 - page 26, line 15 page 30, line 1 - page 31, line 4	7-20
A	EP 1 313 156 A (NISSAN MOTOR CO., LTD) 21 May 2003 (2003-05-21) cited in the application paragraph '0017!; figures	17-20

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/007865

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 09274909	A	21-10-1997	NONE	
JP 10064514	A	06-03-1998	NONE	
WO 0010736	A	02-03-2000	AU 1602099 A	14-03-2000
			CN 1314829 A	26-09-2001
			EP 1113885 A1	11-07-2001
			JP 2002523892 T	30-07-2002
			MX PA01001907 A	15-05-2003
			WO 0010736 A1	02-03-2000
			US 6146716 A	14-11-2000
			US 6855378 B1	15-02-2005
EP 1313156	A	21-05-2003	JP 2003151526 A	23-05-2003
			EP 1313156 A2	21-05-2003
			US 2003091896 A1	15-05-2003